

Claims

The additional planetary transmission for a bicycle comprising:

The first rotatable unbalanced element as a receiver of power from two different sources of energy, such as a foot's muscular energy and gravitational energy converts that energy into mechanical energy for transmission of the driving power, via a second one-way directional rotatable element and a third opposing rotatable element to a driving sprocket of a bicycle, which is fixed to a third element and freely rotates with it on a crank's axle, for transmission of the driving power, via the chain to a freewheel and then to a drivewheel of a bicycle, where it is in the course of normal forward motion from the pedals. The first rotatable element being connected to a crank by means of a leading axle, rotates clockwise together with the crank around the crank's axle and at the same time rotates counter-clockwise around its own axis of rotation together with a leading axle, which is connecting both rotating elements to each other, while the second rotatable element, being connected to the first rotatable element by means of overrunning clutch and to the third rotatable element by means of tothing, rotates clockwise around the third element and crank's axes of rotation, as well as a first element, and at the same time the second element rotates counter-clockwise around its own axle of rotation and due to that, makes the third element, as well as the driving sprocket of a bicycle, rotate faster than usual, then when the driving sprocket rotates together with a crank's axle under the same equal conditions.

2. The system of claim 1, wherein the first rotatable element is a special pedal, as a receiver of power from its unbalanced mass and from foot turning, which is supported also by a foot strap.

3. The system of claim 1, wherein the third element is a sun disk with a chainomatic periphery instead of gearing periphery, while the second element is a satellite sprocket, combined with an overrunning clutch for one-way directional kinematic interaction with a sun disk, by means of a chainomatic periphery.

4. A method of getting for a bicycle high riding speed, due to the interaction between transmissions comprising the steps of:

- Placing the first rotatable element on a crank

- Placing the second rotatable element on a first element, connecting the first element and the second element to one another by means of an overrunning clutch

- Placing the third element on a crank's axle for free rotation on it

- Attaching the crank to a crank's axle for rotation together with it

- Rotating the first element powered by two different sources of energy, such as a foot muscular energy and gravitational energy and converting that energy into mechanical energy for transmission of the driving power, via a second one-way directional element to a third opposing rotatable element, which is together with a driving sprocket freely rotates on a crank's axle. The crank, being connected to a crank's axle rotates clockwise together with a first element, the first and the second elements at the same time rotate counter-clockwise around their own axes of rotation together with a leading axle, which connects the first element and the crank to each other, the second rotatable element, being connected to the first and to the third elements at the same time, makes the third element, as well as a driving sprocket of a bicycle, rotates faster than usual than when a driving sprocket rotates together with a crank's axle under the same equal power conditions.